

"Express Mail" Label No. E-143901US  
Date of Deposit: July 24, 2000

7-26-00

GAU 1631 #7  
mp  
7/24/00

PATENT  
Attorney Docket No.: 19496-003200US

I hereby certify that this correspondence is being deposited with the United States Postal Service "Express Mail Post Office to Address" service under 37 CFR 1.10 on the date indicated above and is addressed to:

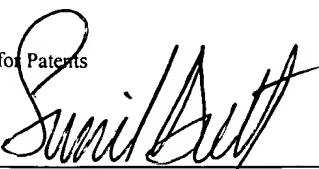
Box IDS

Art Unit 1631

Assistant Commissioner for Patents

Washington, D.C. 20231

By: \_\_\_\_\_

  
Sunil Dutt

RECEIVED  
TECH-ENTER 1600/2900  
JUL 26 2000

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

Case et al.

Application No.: 09/456,100

Filed: December 6, 1999

For: METHODS OF USING  
RANDOMIZED LIBRARIES OF ZINC  
FINGER PROTEINS FOR THE  
IDENTIFICATION OF GENE  
FUNCTION

Examiner: Unassigned

Art Unit: 1631

**SUPPLEMENTAL INFORMATION  
DISCLOSURE STATEMENT UNDER  
37 CFR §1.97 and §1.98**

Box IDS

Art Unit 1631

Assistant Commissioner for Patents

Washington, D.C. 20231

Sir:

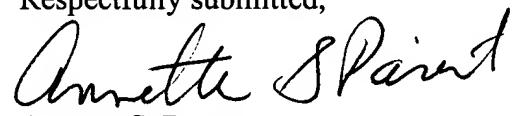
The references cited on attached form PTO-1449 are being called to the attention of the Examiner. Copies of the references are enclosed. It is respectfully requested that the cited information be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and

no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that no fee is required for submission of this statement, since it is being submitted prior to the first Office Action. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,

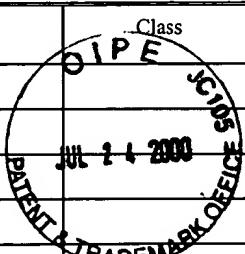


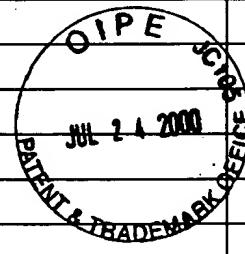
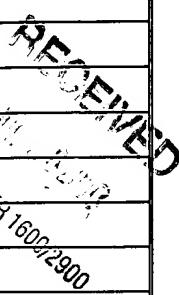
Annette S. Parent  
Reg. No. 42,058

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, 8<sup>th</sup> Floor  
San Francisco, California 94111-3834  
Tel: 415-576-0200  
Fax: 415-576-0300  
ASP:jkh

SF 1115545 v1

FORM PTO-1449 (Modified) LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		Attorney Docket No.: 19496-003200US	Application No.: 09/456,100
		Applicant: Case et al.	
		Filing Date: December 6, 1999	Group: 1631
Reference Designation		U.S. PATENT DOCUMENTS	
		Page 1	
Examiner Initial	Document No.	Date	Name
AA	6,013,453	1/11/2000	Choo et al.
AB	6,007,988	12/28/99	Choo et al.
AC	6,001,885	12/14/99	Vega et al.
AD	5,972,615	10/26/99	An et al.
AE	5,916,794	6/29/99	Chandrasegaran
AF	5,871,907	2/16/99	Winter et al.
AG	5,871,902	2/16/99	Weininger et al.
AH	5,869,618	2/9/99	Lippman et al.
AI	5,792,640	8/11/98	Chandrasegaran
AJ	5,789,538	8/4/98	Rebar et al.
AK	5,702,914	12/30/97	Evans et al.
AL	5,674,738	10/7/97	Abramson et al.
AM	5,639,592	6/17/97	Evans et al.
AN	5,597,693	1/28/97	Evans et al.
AO	5,578,483	11/26/96	Evans et al.
AP	5,498,530	3/12/96	Schatz et al.
AQ	5,487,994	1/30/96	Chandrasegaran
AR	5,436,150	7/25/95	Chandrasegaran
AS	5,403,484	4/4/95	Ladner et al.
AT	5,376,530	12/27/94	De The et al.
AU	5,356,802	10/18/94	Chandrasegaran
AV	5,350,840	9/27/94	Call et al.
AW	5,348,864	9/20/94	Barbacid
AX	5,340,739	8/23/94	Stevens et al.
AY	5,324,819	6/28/94	Oppermann et al.
AZ	5,324,818	6/28/94	Nabel et al.
BA	5,324,638	6/28/94	Tao et al.
BB	5,302,519	4/12/94	Blackwood et al.
BC	5,243,041	9/7/93	Fernandez-Pol
BD	5,223,409	6/29/93	Ladner et al.
BE	5,198,346	3/30/93	Ladner et al.
BF	5,096,815	3/17/92	Ladner et al.
BG	5,096,814	3/17/92	Aivasidis et al.
BH	4,990,607	2/5/91	Katagiri et al.
FOREIGN PATENT DOCUMENTS			



FORM PTO-1449 (Modified)			Attorney Docket No.: 19496-003200US		Application No.: 09/456,100	
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)			Applicant: Case et al.			
			Filing Date: December 6, 1999		Group: 1631	
	Document No.	Date	Country	Class	Sub-class	Translation (Yes/No)
BI	WO 00/27878	5/18/2000	PCT			
BJ	WO 00/23464	4/27/2000	PCT			
BK	WO 99/48909	9/30/99	PCT			
BL	WO 99/47656	9/23/99	PCT			
BM	WO 99/45132	9/10/99	PCT			
BN	WO 99/42474	8/26/99	PCT			
BO	WO 99/36553	7/22/99	PCT			
BP	WO 98/54311	12/3/98	PCT			
BQ	WO 98/53060	11/26/98	PCT			
BR	WO 98/53059	11/26/98	PCT			
BS	WO 98/53058	11/26/98	PCT			
BT	WO 98/53057	11/26/98	PCT			
BU	WO 96/32475	10/17/96	PCT			
BV	WO 96/20951	7/11/96	PCT			
BW	WO 96/06166	2/29/96	PCT			
BX	WO 96/06110	2/29/96	PCT			
BY	WO 95/19431	7/20/95	PCT			

**OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)**

BZ	Agarwal et al., "Stimulation of Transcript Elongation Requires both the Zinc Finger and RNA Polymerase II Binding Domains of Human TFIIS," <u>Biochemistry</u> , 30(31):7842-7851 (1991).
CA	Antao et al., "A thermodynamic study of unusually stable RNA and DNA hairpins," <u>Nuc. Acids. Res.</u> , 19(21):5901-5905 (1991).
CB	Barbas, C. F., "Recent advances in phage display," <u>Curr. Opin. Biotech.</u> , 4:526-530 (1993).
CC	Barbas et al., "Assembly of combinatorial antibody libraries on phage surfaces: The gene III site," <u>PNAS</u> , 88:7978-7982 (1991).
CD	Barbas et al., "Semisynthetic combinatorial antibody libraries: A chemical solution to the diversity problem," <u>PNAS</u> , 89:4457-4461 (1992).
CE	Bellefroid et al., "Clustered organization of homologous KRAB zinc-finger genes with enhanced expression in human T lymphoid cells," <u>EMBO J.</u> , 12(4):1363-1374 (1993).
CF	Berg, J. M., "DNA Binding Specificity of Steriod Receptors," <u>Cell</u> , 57:1065-1068 (1989).
CG	Berg, J. M., "Sp1 and the subfamily of zinc finger proteins with guanine-rich binding sites," <u>PNAS</u> , 89:11109-11110 (1992).
CH	Berg et al., "The Galvanization of Biology: A Growing Appreciation for the Roles of Zinc," <u>Science</u> , 271:1081-1085 (1996).
CI	Bergqvist et al., "Loss of DNA-binding and new transcriptional <i>trans</i> -activation function in polyomavirus large T-antigen with mutation of zinc finger motif," <u>Nuc. Acids Res.</u> , 18(9):2715-2720 (1990).
CJ	Blaese et al., "Vectors in cancer therapy: how will they deliver?," <u>Cancer Gene Therapy</u> , 2(4):291-297 (1995).
CK	Celenza et al., "A Yeast Gene That Is Essential for Release from Glucose Repression Encodes a Protein Kinase," <u>Science</u> , 233:1175-1180 (1986).

FORM PTO-1449 (Modified) LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		Attorney Docket No.: 19496-003200US Applicant: Case et al. Filing Date: December 6, 1999	Application No.: 09/456,100 Group: 1631
CL	Cheng et al., "Identification of Potential Target Genes for Adr1p through Characterization of Essential Nucleotides in UAS1," <i>Mol. Cellular Biol.</i> , 14(6):3842-3852 (1994).		
CM	Cheng et al., "A Single Amino Acid substitution in Zinc Finger 2 of Adr1p Changes its Binding Specificity at two Positions in UAS1," <i>J. Mol. Biol.</i> , 251:1-8 (1995)		
SN	Choo et al., "A role in DNA binding for the linker sequences of the first three zinc fingers of TFIIB," <i>Nuc. Acids Res.</i> , 21(15):3341-3346 (1993).		
CO	Choo et al., "Designing DNA-binding proteins on the surface of filamentous phage," <i>Curr. Opin. Biotechnology</i> , 6:431-436 (1995).		
CP	Choo et al., "Promoter-specific Activation of Gene Expression Directed by Bacteriophage-selected Zinc Fingers," <i>J. Mol. Biol.</i> , 273:525-532 (1997).		
	Choo, Y., "Recognition of DNA methylation by zinc fingers," <i>Nature Struct. Biol.</i> , 5(4):264-265 (1998).		
CR	Choo et al., "All wrapped up," <i>Nature Structural Biology</i> , 5(4):253-255 (1998).		
CS	Choo, Y., "End effects in DNA recognition by zinc finger arrays," <i>Nuc. Acids Res.</i> , 26(2):554-557 (1998).		
CT	Choo et al., "Physical basis of a protein-DNA recognition code," <i>Curr. Opin. Struct. Biol.</i> , 7(1):117-125 (1997)		
CU	Choo et al., "Toward a code for the interactions of zinc fingers with DNA: Selection of randomized fingers displayed on phage," <i>PNAS</i> , 91:11163-11167 (1994).		
CV	Choo et al., "Selection of DNA binding sites for zinc fingers using rationally randomized DNA reveals coded interactions," <i>PNAS</i> , 91:11168-11172 (1994)		
CW	Clarke et al., "Zinc Fingers in <i>Caenorhabditis elegans</i> : Finding Families and Probing Pathways," <i>Science</i> , 282:2018-2022 (1998).		
CX	Crozatier et al., "Single Amino Acid Exchanges in Separate Domains of the Drosophila serendipity δ Zinc Finger Protein Cause Embryonic and Sex Biased Lethality," <i>Genetics</i> , 131:905-916 (1992).		
CY	Debs et al., "Regulation of Gene Expression <i>in Vivo</i> by Liposome-mediated Delivery of a Purified Transcription Factor*," <i>J. Biological Chemistry</i> , 265(18):10189-10192 (1990).		
CZ	Desjarlais et al., "Length-encoded multiplex binding site determination: Application to zinc finger proteins," <i>PNAS</i> , 91:11099-11103 (1994).		
DA	Desjarlais et al., "Use of a zinc-finger consensus sequence framework and specificity rules to design specific DNA binding proteins," <i>PNAS</i> , 90:2256-2260 (1993)		
DB	Desjarlais et al., "Toward rules relating zinc finger protein sequences and DNA binding site preferences," <i>PNAS</i> , 89(16):7345-7349 (1992)		
DC	Desjarlais et al., "Redesigning the DNA-Binding Specificity of a Zinc Finger Protein: A Data Base-Guided Approach," <i>Proteins: Structure, Function, and Genetics</i> , 12(2):101-104 (1992)		
DD	Desjarlais et al., "Redesigning the DNA-Binding Specificity of a Zinc Finger Protein: A Data Base-Guided Approach," <i>Proteins: Structure, Function, and Genetics</i> , 13(3):272 (1992)		
DE	DiBello et al., "The Drosophila Broad-ComplexEncodes a Family of Related Proteins Containing Zinc Fingers," <i>Genetics</i> , 129:385-397 (1991).		
DF	Elrod-Erickson et al., "High-resolution structures of variant Zif268-DNA complexes: implications for understanding zinc finger-DNA recognition," <i>Structure</i> , 6(4):451-464 (1998).		
DG	Elrod-Erickson et al., "Zif268 protein-DNA complex refined at 1.6 Å: a model system for understanding zinc finger-DNA interactions," <i>Structure</i> , 4(10):1171-1180 (1996)		
DH	Fairall et al., "The crystal structure of a two zinc-finger peptide reveals an extension to the rules for zinc-finger/DNA recognition," <i>Nature</i> , 366:483-487 (1993)		
DI	Frankel et al., "Fingering Too Many Proteins," <i>Cell</i> , 53:675 (1988).		
DJ	Friesen et al., "Phage Display of RNA Binding Zinc Fingers from Transcription Factor IIIA*," <i>J. Biological Chem.</i> , 272(17):10994-10997 (1997).		
DK	Friesen et al., "Specific RNA binding proteins constructed from zinc fingers," <i>Nature Structural Biology</i> , 5(7):543-546(1998).		

FORM PTO-1449 (Modified) LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		Attorney Docket No.: 19496-003200US Applicant: Case et al. Filing Date: December 6, 1999	Application No.: 09/456,100 Group: 1631
DL	Gogos et al., "Recognition of diverse sequences by class I zinc fingers: Asymmetries and indirect effects on specificity in the interaction between CF2II and A+T-rich sequence elements," <i>PNAS</i> , 93(5):2159-2164 (1996)		
DM	Greisman et al., "A General Strategy for Selecting High-Affinity Zinc Finger Proteins for Diverse DNA Target Sites," <i>Science</i> , 275:657-661 (1997)		
DN	Hamilton et al., "High affinity binding sites for the Wilms' tumor suppressor protein WT1," <i>Nuc. Acids Res.</i> , 23(2):277-284 (1995).		
DO	Hanas et al., "Internal deletion mutants of <i>Xenopus</i> transcription factor IIIA," <i>Nuc. Acids Res.</i> , 17(23):9861-9870 (1989).		
DO	Hayes et al., "Locations of Contacts between Individual Zinc Fingers of <i>Xenopus laevis</i> Transcription Factor IIIA and the Internal Control Region of a 5S RNA Gene," <i>Biochemistry</i> , 31:11600-11605 (1992).		
DO	Heinzel et al., "A complex containing N-CoR, mSin3 and histone deacetylase mediates transcriptional repression," <i>Nature</i> , 387:43-48 (1997).		
DR	Hirst et al., "Discrimination of DNA response elements for thyroid hormone and estrogen is dependant on dimerization of receptor DNA binding domains," <i>PNAS</i> , 89:5527-5531 (1992).		
DS	Hoffman et al., "Structures of DNA-binding mutant zinc finger domains: Implications for DNA binding," <i>Protein Science</i> , 2:951-965 (1993).		
DT	Isalan et al., "Synergy between adjacent zinc fingers in sequence-specific DNA recognition," <i>PNAS</i> , 94(11):5617-5621 (1997)		
DU	Isalan et al., "Comprehensive DNA Recognition through Concerted Interactions from Adjacent Zinc Fingers," <i>Biochemistry</i> , 37:12026-12033 (1998).		
DV	Jacobs, G. H., "Determination of the base recognition positions of zinc fingers from sequence analysis," <i>EMBO J.</i> , 11(12):4507-4517 (1992).		
DW	Jamieson et al., "A zinc finger directory for high-affinity DNA recognition," <i>PNAS</i> , 93:12834-12839 (1996).		
DX	Jamieson et al., "In Vitro Selection of Zinc Fingers with Altered DNA-Binding Specificity," <i>Biochemistry</i> , 33(19):5689-5695 (1994)		
DY	Julian et al., "Replacement of His23 by Cys in a zinc finger of HIV-1 NCp7 led to a change in 1H NMR-derived 3D structure and to a loss of biological activity," <i>FEBS letters</i> , 331(1,2):43-48 (1993).		
DZ	Kamiuchi et al., "New multi zinc finger protein: biosynthetic design and characteristics of DNA recognition," <i>Nucleic Acids Symposium Series</i> , 37:153-154 (1997).		
EA	Kim et al., "Serine at Position 2 in the DNA Recognition helix of a Cys2-His2 Zinc finger Peptide is Not, in General, Responsible for Base Recognition," <i>J. Mol. Biol.</i> , 252:1-5 (1995).		
EB	Kim et al., "Site-specific cleavage of DNA-RNA hybrids by zinc finger/FokI cleavage domain fusions," <i>Gene</i> , 203:43-49 (1997).		
EC	Kim et al., "A 2.2 Å resolution crystal structure of a designed zinc finger protein bound to DNA," <i>Nat. Struct. Biol.</i> , 3(11):940-945 (1996)		
ED	Kim et al., "Getting a handhold on DNA: Design of poly-zinc finger proteins with femtomolar dissociation constants," <i>PNAS</i> , 95:2812-2817 (1998).		
EE	Kim et al., "Design of TATA box-binding protein/zinc finger fusions for targeted regulation of gene expression," <i>PNAS</i> , 94:3616-3620 (1997)		
EF	Kim et al., "Hybrid restriction enzymes: Zinc finger fusions to Fok I cleavage domain," <i>PNAS</i> , 93:1156-1160 (1996)		
EG	Kinzler et al., "The GLI gene is a member of the Kruppel family of zinc finger proteins," <i>Nature</i> , 332:371-4 (1988).		
EH	Klug, A., "Gene Regulatory Proteins and Their Interaction with DNA," <i>Ann. NY Acad. Sci.</i> , 758:143-160 (1995).		
EI	Klug et al., "Protein Motifs 5: Zinc Fingers," <i>FASEB J.</i> , 9:597-604 (1995).		
EJ	Kulda et al., "The regulatory gene <i>areA</i> mediating nitrogen metabolite repression in <i>Aspergillus nidulans</i> . Mutations affecting specificity of gene activation alter a loop residue of a putative zinc finger," <i>EMBO J.</i> , 9(5):1355-1364 (1990).		

FORM PTO-1449 (Modified) LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		Attorney Docket No.: 19496-003200US Applicant: Case et al. Filing Date: December 6, 1999	Application No.: 09/456,100 Group: 1631
EK	Laird-Offringa et al., "RNA-binding proteins tamed," <u>Nat. Structural Biol.</u> , 5(8):665-668 (1998).		
EL	Mandel-Gutfreund et al., "Quantitative parameters for amino acid-base interaction: implications for prediction of protein-DNA binding sites," <u>Nuc. Acids Res.</u> , 26(10):2306-2312 (1998).		
EM	Margolin et al., "Kruppel-associated boxes are potent transcriptional repression domains," <u>PNAS</u> , 91:4509-4513 (1994).		
HN	Mizushima et al., "pEF-BOS, a powerful mammalian expression vector," <u>Nuc. Acids Res.</u> , 18(17):5322 (1990).		
EO	Nardelli et al., "Zinc finger-DNA recognition: analysis of base specificity by site-directed mutagenesis," <u>Nuc. Acids Res.</u> , 20(16):4137-4144 (1992)		
EP	Nardelli et al., "Base sequence discrimination by zinc-finger DNA-binding domains," <u>Nature</u> , 349:175-178 (1991).		
EQ	Nekludova et al., "Distinctive DNA conformation with enlarged major groove is found in Zn-finger—DNA and other protein—DNA complexes," <u>PNAS</u> , 91:6948-6952 (1994)		
ER	Orkin et al., "Report and Recommendations of the Panel to Assess the NIH Investment in Research on Gene Therapy" (1995)		
ES	Pabo et al., "Systematic Analysis of Possible Hydrogen Bonds between Amino Acid Side Chains and B-form DNA," <u>J. Biomolecular Struct. Dynamics</u> , 1:1039-1049 (1983).		
ET	Pabo et al., "Protein-DNA Recognition," <u>Ann. Rev. Biochem.</u> , 53:293-321 (1984).		
EU	Pabo, C. O., "Transcription Factors: Structural Families and Principles of DNA Recognition," <u>Ann. Rev. Biochem.</u> , 61:1053-1095 (1992).		
EV	Pavletich et al., "Crystal Structure of a Five-Finger GLI-DNA Complex: New Perspectives on Zinc Fingers," <u>Science</u> , 261:1701-1707 (1993).		
EW	Pavletich et al., "Zinc Finger-DNA Recognition: Crystal Structure of a Zif268-DNA Complex at 2.1 Å," <u>Science</u> , 252:809-817 (1991)		
EX	Pengue et al., "Repression of transcriptional activity at a distance by the evolutionarily conserved KRAB domain present in a subfamily of zinc finger proteins," <u>Nuc. Acids Res.</u> , 22(15):2908-2914 (1994).		
EY	Pengue et al., "Transcriptional Silencing of Human Immunodeficiency Virus Type 1 Long Terminal Repeat-Driven Gene Expression by the Kruppel-Associated Box Repressor Domain Targeted to the Transactivating Response Element," <u>J. Virology</u> , 69(10):6577-6580 (1995).		
EZ	Pengue et al., "Kruppel-associated box-mediated repression of RNA polymerase II promoters is influenced by the arrangement of basal promoter elements," <u>PNAS</u> , 93:1015-1020 (1996).		
FA	Pomerantz et al., "Structure-Based Design of a Dimeric Zinc Finger Protein," <u>Biochemistry</u> , 37(4):965-970 (1998)		
FB	Qian et al., "Two-Dimensional NMR Studies of the Zinc Finger Motif: Solution Structures and Dynamics of Mutant ZFY Domains Containing Aromatic Substitutions in the Hydrophobic Core," <u>Biochemistry</u> , 31:7463-7476 (1992).		
FC	Quigley et al., "Complete Androgen Insensitivity Due to Deletion of Exon C of the Androgen Receptor Gene Highlights the Functional Importance of the Second Zinc Finger of the Androgen Receptor <i>in Vivo</i> ," <u>Molecular Endocrinology</u> , 6(7):1103-1112 (1992).		
FD	Rauscher et al., "Binding of the Wilms' Tumor Locus Zinc Finger Protein to the EGR-1 Consensus Sequence," <u>Science</u> , 250:1259-1262 (1990).		
FE	Ray et al., "Repressor to activator switch by mutations in the first Zn finger of the glucocorticoid receptor: Is direct DNA binding necessary?" <u>PNAS</u> , 88:7086-7090 (1991).		
FF	Rebar et al., "Phage Display Methods for Selecting Zinc Finger Proteins with Novel DNA-Binding Specificities," <u>Methods in Enzymology</u> , 267:129-149 (1996).		
FG	Rebar et al., "Zinc Finger Phage: Affinity Selection of Fingers with New DNA-Binding Specificities," <u>Science</u> , 263:671-673 (1994)		
FH	Reith et al., "Cloning of the major histocompatibility complex class II promoter binding protein affected in a hereditary defect in class II gene regulation," <u>PNAS</u> , 86:4200-4204 (1989).		
FI	Rice et al., "Inhibitors of HIV Nucleocapsid Protein Zinc Fingers as Candidates for the Treatment of AIDS," <u>Science</u> , 270:1194-1197 (1995).		

FORM PTO-1449 (Modified) LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		Attorney Docket No.: 19496-003200US Applicant: Case et al. Filing Date: December 6, 1999	Application No.: 09/456,100 Group: 1631
<input type="checkbox"/> FJ	Rivera et al., "A humanized system for pharmacologic control of gene expression," <i>Nature Medicine</i> , 2(9):1028-1032 (1996)		
<input type="checkbox"/> FK	Rollins et al., "Role of TFIIIA Zinc Fingers In vivo: Analysis of Single-Finger Function in Developing <i>Xenopus</i> Embryos," <i>Molecular Cellular Biology</i> , 13(8):4776-4783 (1993).		
<input checked="" type="checkbox"/> FL	Saleh et al., "A Novel Zinc Finger Gene on Human Chromosome 1qter That Is Alternatively Spliced in Human Tissues and Cell Lines," <i>Am. J. Hum. Genet.</i> , 52:192-203 (1993).		
<input checked="" type="checkbox"/> FN	JUL 11 1996 SUITPE FL PATENT & TRADEMARK OFFICE Shi et al., "Specific DNA-RNA Hybrid Binding by Zinc Finger Proteins," <i>Science</i> , 268:282-284 (1995).		
<input type="checkbox"/> FO	Shi et al., "DNA Unwinding Induced by Zinc Finger Protein Binding," <i>Biochemistry</i> , 35:3845-3848 (1996)		
<input type="checkbox"/> FP	Shi et al., "A direct comparison of the properties of natural and designed finger proteins," <i>Chem. &amp; Biol.</i> , 2(2):83-89 (1995)		
<input type="checkbox"/> FQ	Singh et al., "Molecular Cloning of an Enhancer Binding Protein: Isolation by Screening of an Expression Library with a Recognition Site DNA," <i>Cell</i> , 52:415-423 (1988).		
<input type="checkbox"/> FR	South et al., "The Nucleocapsid Protein Isolated from HIV-1 Particles Binds Zinc and Forms Retroviral-Type Zinc Fingers," <i>Biochemistry</i> , 29:7786-7789 (1990).		
<input type="checkbox"/> FS	Suzuki et al., "Stereochemical basis of DNA recognition by Zn fingers," <i>Nuc. Acids Res.</i> , 22(16):3397-3405 (1994)		
<input type="checkbox"/> FT	Suzuki et al., "DNA recognition code of transcription factors in the helix-turn-helix, probe helix, hormone receptor, and zinc finger families," <i>PNAS</i> , 91:12357-12361 (1994)		
<input type="checkbox"/> FU	Swirnoff et al., "DNA-Binding Specificity of NGFI-A and Related Zinc Finger Transcription Factors," <i>Mol. Cell. Biol.</i> , 15(4):2275-2287 (1995)		
<input type="checkbox"/> FV	Taylor et al., "Designing Zinc-Finer ADR1 Mutants with Altered Specificity of DNA Binding to T in UAS1 Sequences," <i>Biochemistry</i> , 34:3222-3230 (1995)		
<input type="checkbox"/> FW	Thiesen et al., "Determination of DNA binding specificities of mutated zinc finger domains," <i>FEBS Letters</i> , 283(1):23-26 (1991).		
<input type="checkbox"/> FX	Thiesen et al., "Amino Acid Substitutions in the SP1 Zinc Finger Domain Alter the DNA Binding Affinity to Cognate SP1 Target Site," <i>Biochem. Biophys. Res. Communications</i> , 175(1):333-338 (1991).		
<input type="checkbox"/> FY	Thukral et al., "Localization of a Minimal Binding Domain and Activation Regions in Yeast Regulatory Protein ADR1," <i>Molecular Cellular Biology</i> , 9(6):2360-2369 (1989).		
<input type="checkbox"/> FZ	Thukral et al., "Two Monomers of Yeast Transcription Factor ADR1 Bind a Palindromic Sequence Symmetrically to Activate <i>ADH2</i> Expression," <i>Molecular Cellular Biol.</i> , 11(3):1566-1577 (1991).		
<input type="checkbox"/> GA	Thukral et al., "Alanine scanning site-directed mutagenesis of the zinc fingers of transcription factor ADR1: Residues that contact DNA and that transactivate," <i>PNAS</i> , 88:9188-9192 (1991), + correction page.		
<input type="checkbox"/> GB	Thukral et al., "Mutations in the Zinc Fingers of ADR1 That Change the Specificity of DNA Binding and Transactivation," <i>Mol. Cell Biol.</i> , 12(6):2784-2792 (1992)		
<input type="checkbox"/> GC	Vortkamp et al., "Identification of Optimized Target Sequences for the GLI3 Zinc Finger Protein," <i>DNA Cell Biol.</i> , 14(7):629-634 (1995).		
<input type="checkbox"/> GD	Webster et al., "Conversion of the E1A Cys4 zinc finger to a nonfunctional His2, Cys2 zinc finger by a single point mutation," <i>PNAS</i> , 88:9989-9993 (1991).		
<input type="checkbox"/> GE	Whyatt et al., "The two zinc finger-like domains of GATA-1 have different DNA binding specificities," <i>EMBO J.</i> , 12(13):4993-5005 (1993).		
<input type="checkbox"/> GF	Wilson et al., "In Vivo Mutational analysis of the NGFI-A Zinc Fingers*," <i>J. Biol. Chem.</i> , 267(6):3718-3724 (92).		
<input type="checkbox"/> GG	Witzgall et al., "The Kruppel-associated box-A (KRAB-A) domain of zinc finger proteins mediates transcriptional repression," <i>PNAS</i> , 91:4514-4518 (1994).		
<input type="checkbox"/> GH	Wright et al., "Expression of a Zinc Finger Gene in HTLV-I- and HTLV-II-transformed Cells," <i>Science</i> , 248:588-591 (1990).		
<input type="checkbox"/> GI	Wu et al., "Building zinc fingers by selection: Toward a therapeutic application," <i>PNAS</i> , 92:344-348 (1995).		
<input type="checkbox"/> GI	Yang et al., "Surface plasmon resonance based kinetic studies of zinc finger-DNA interactions," <i>J. Immunol. Methods</i> , 183:175-182 (1995).		

FORM PTO-1449 (Modified) LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		Attorney Docket No.: 19496-003200US	Application No.: 09/456,100
		Applicant: Case et al.	
		Filing Date: December 6, 1999	Group: 1631
GJ	Yu et al., "A hairpin ribozyme inhibits expression of diverse strains of human immunodeficiency virus type 1," PNAS, 90:6340-6344 (1993).		
EXAMINER	DATE CONSIDERED		

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

